

# FOOD SECURITY RESEARCH PROJECT – ZAMBIA

## **Annual Narrative Report** (October 1, 2008 to September 30, 2009)

**A Collaborative Research, Capacity Building, and Policy Outreach Project**

*between*

**The Ministry of Agriculture and Cooperatives (MACO)**

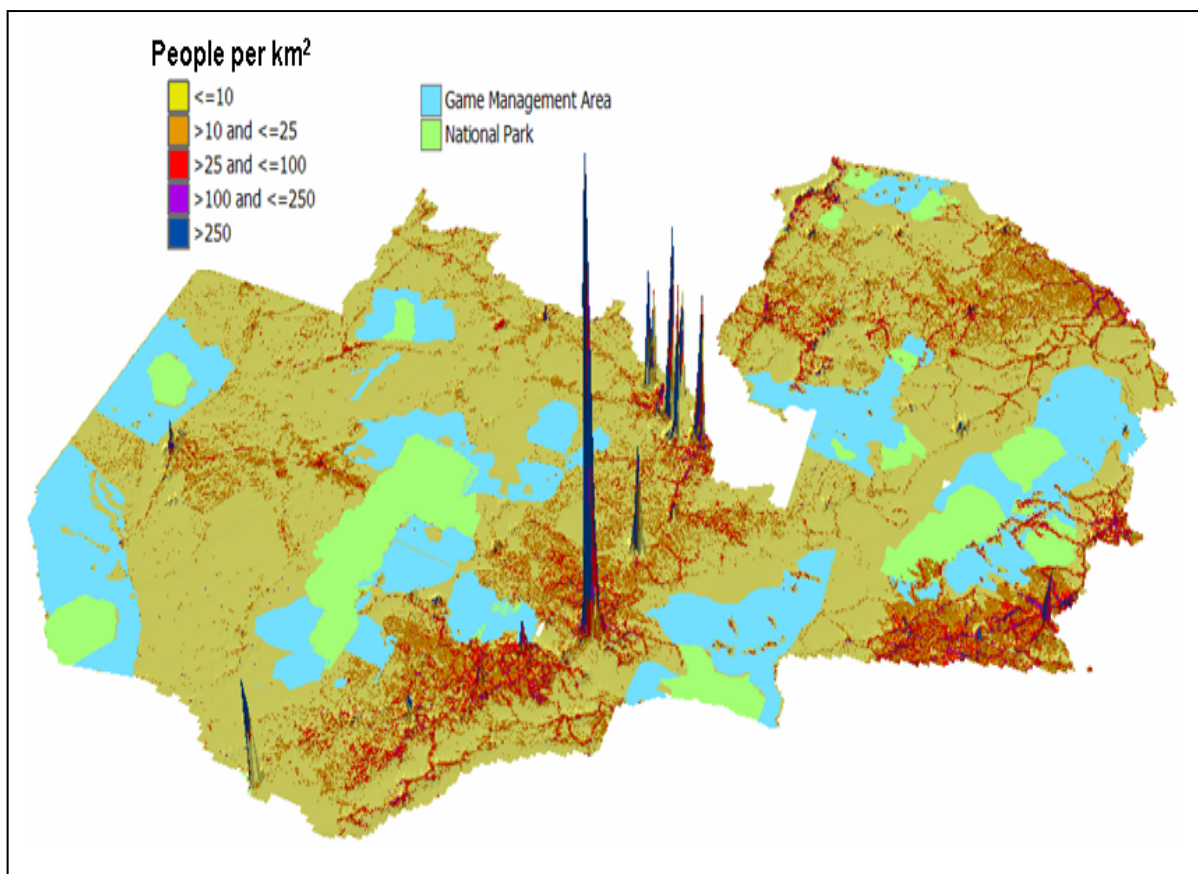
**The Agricultural Consultative Forum (ACF)**

**The Central Statistical Office (CSO) / Ministry of Finance (MOF)**

**Michigan State University's Department of Agricultural Economics (MSU)**

**United States Agency for International Development/Zambia (USAID)**

**Swedish International Development Agency (SIDA)**



**Density and Distribution of Zambian Population and Major Wildlife Areas - 2007**



## Acronyms

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ACF	Agricultural Consultative Forum
ACU	Acceleration of Cassava Utilization
AFS	Agriculture and Food Security
AIDS	Acquired Immunity Deficiency Syndrome
AIM	Agricultural Input Marketing
AMIC	Agriculture Marketing Information Centre
CAADP	Comprehensive African Agriculture Development Programme
CF Conservation	Farming
CFU	Conservation Farming Unit
CFS	Crop Forecasting Survey
COMESA	Common Market Eastern and Southern Africa
CSO	Central Statistics Office
ECAPAPA	Eastern and Central Africa Programme for Agricultural Policy Analysis
FANRPAN	Food Agriculture and Natural Resources Policy Analysis Network
FAO	Food and Agriculture Organization of the United Nations
FoDiS	Food Crop Diversification Support Project
FRA	Food Reserve Agency
FSRP	Food Security Research Project
GART	Golden Valley Agricultural Research Trust
GMA	Game Management Areas
HIV	Human Immunity Virus
INESOR	Institute for Social and Economic Research
ITC	International Trade Centre
M&E	Monitoring and Evaluation
MACO	Ministry of Agricultural and Cooperatives
MATEP	Market Access, Trade and Enabling Policies
MCTI	Ministry of Commerce, Trade, and Industry
MoFND	Ministry of Finance and National Development
MSU	Michigan State University
NAIS	National Agriculture Information Service
NGO	Non Governmental Organization
PAM	Programme Against malnutrition
PFP	Purchase for Progress
PIU	Programme Implementation Unit
PS Perm	Permanent Secretary

PSD	Private Sector Development Group
SAKSS	Strategic Analysis and Knowledge Support System
SIDA	Swedish International Development Agency
UNDP	United Nation Development Programme
UNZA	University of Zambia
VAT	Value Added Tax
WFP	World Food Programme
ZARI	Zambia Agricultural Research Institute
ZBF	Zambia Business Forum
ZNFU	Zambia National Farmers Union

# Annual Narrative Report

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## 1. Brief Overview and Facts

### Cooperating Institutions

Ministry of Agriculture and Cooperatives (MACO), Economics and Market Development  
Department: Policy and Planning Branch and Marketing Development Branch

Ministry of Finance and National Development (MFND)

Ministry of Commerce, Trade, and Industry (MCTI)

Agricultural Consultative Forum (ACF)

Central Statistical Office (CSO), Agriculture and Environment Division, Economics and  
Statistics Division

Golden Valley Agricultural Research Trust (GART)

University of Zambia (UNZA), Institute for Social and Economic Research (INESOR)

Food Reserve Agency (FRA)

Swedish International Development Agency-Zambia (SIDA)

Agency for International Development, Zambia Mission (USAID/Zambia)

Agency for International Development, Bureau for Economic Growth, Agriculture and Trade,  
Office of Agriculture and Food Security (EGAT/AFS)

Department of Agricultural Economics, Michigan State University (MSU)

## 2. Objectives

FSRP's mandate is to contribute to effective policy dialogue, capacity building, and ultimately an improved agricultural policy environment in Zambia, through collaboration with government and the private sector. The FSRP aims to achieve these objectives through in-service capacity building, applied analysis, and policy outreach. A hallmark of the MSU/FSRP approach is the "joint products" approach, whereby training, applied research, and outreach are undertaken collaboratively with in-country stakeholders and government counterparts. The "joint products" approach is designed to achieve these broad results:

**Capacity building** for local Zambian counterparts, including training in the design, implementation, and analysis of household-level and market-level data collection for policy analysis and priority-setting purposes. This is accomplished mainly through in-service training of public and private sector collaborators, but also through training courses and seminars targeted to specific government organizations where improved analytical capacity is most needed;

**Applied research** to provide baseline information on smallholder production patterns and crop mix, input use, marketing behavior, measures of farm productivity, farm and non-farm incomes, food purchases and consumption, and other basic household-level information necessary to monitor the impacts of changes in the agricultural policy environment on selected socio-economic and regional groups in Zambia; and

**Outreach activities** to liaise with ACF, MACO, and other public and private policy making groups in Zambia on strategies for promoting smallholder agricultural productivity and income growth, and household food security in support of improved agricultural policy making in Zambia.

To carry out its research mandate, the FSRP in Zambia aims to: (a) strengthen the capacity of MACO, ACF, and other local institutions and government agencies responsible for food security in Zambia to carry out applied research and policy analysis on food security; (b) strengthen the capacity of MACO, Ministry of Finance and National Development, and Ministry of Commerce, Trade, and Industry to help coordinate research on national food

security issues; (c) strengthen the Central Statistical Office (CSO) to carry out surveys, manage and process data, and perform basic analyses useful to policy makers; and (d) strengthen MACO's management and implementation of agricultural marketing information services.

### **3. Implementation Approach of the Food Security Research Project**

The FSRP's main base is its field office in Lusaka. Field office research fellows and research specialists collaborate intensively with MSU campus-based staff on analysis and outreach efforts. This is complemented by frequent TDY visits of campus faculty to Zambia to work with the Lusaka-based team and officials from local collaborating organizations.

The FSRP's substantive research and outreach activities are guided by the FSRP's semi-annual Advisory Board consultations. From these Board meetings, an agenda for research, technical support, and outreach activities is identified and approved. Members of the Advisory Board include MACO, ACF, INESOR/UNZA, CSO, ZNFU, SIDA, USAID, and FSRP.

### **4. Overview of Major Achievements (October 2008 – September 2009)**

Consistent with its mandate, the FSRP has achieved progress in (a) concrete policy change; (b) improving the quality of government policy discussions, which while not yet resulting in tangible policy change, has sowed the seeds for future improvements in the policy environment, and (c) capacity building of public agricultural entities, which will also have long-term payoffs for *Zambian agriculture*. Specific achievements are as follows:

#### **4.1 Support for Concrete Policy Change**

- **Cotton Value Chain:** Working to support the cotton sector since early 2006, FSRP has remained engaged on a practical policy level and has continued to utilize its research results to contribute to forward momentum towards eventual enactment of the revised Cotton Act. ACF/FSRP named advisory member of Cotton Board: After Parliament failed to review and pass the revised Cotton Act, stakeholders agreed in late 2008 to seek MACO approval to seat the Board under the existing Act. By April the Board 2009 had been seated, and has named FSRP a non-voting advisory member of the Board, as a means to ensuring regular analytical input, and in recognition of FSRP's history of such work.
- **Maize Value Chain:** Working closely with public and private stakeholders in the maize value chain, FSRP continued to actively engage high level policy makers and provide timely research notes on maize marketing and trade issues in Zambia and the region at large.
  - During the year 2008-2009, FSRP outreach team met with the Minister of Agriculture and Cooperatives, Dr. Brian Chituwo to provide him with some basic information on: likely maize supply and demand in the Southern Africa region in the forth-coming marketing season; why it was important for FRA to set policies consistent with protecting some potential export options, and to especially, not announce any FRA indicative prices until the crop forecast is finished and balance sheet announced. The Minister responded positively to this advice.
  - CSO agreed to major methodological changes proposed by ACF/FSRP to the Crop Forecast and announcement of the National Food Balance: ACF/FSRP led the process of technical review featuring meaningful public/private sector cooperation. These efforts assisted MACO in implementing the first ever "lock-up" crop forecast

- review and national food balance announcement session at MACO with private and public sector cooperation.
- The FSRP outreach team met with the Chief Executive of FRA to share with him some insights on issues to consider when dealing/discussing the maize indicative price or rather maize floor price for marketing season 2009/10, stocking up of FRA strategic reserves, maize production costs and Zambia National Farmers Union (ZNFU) and private sector participation. There was evidence in the press to show that the notes that FSRP provided to the FRA Chief Executive and Minister of Agriculture were guiding them during the discussions on 2009/10 crop forecast and maize pricing.
  - ACF/FSRP organized a High Policy Level dialogue meeting with ministers at Protea Lodge in Chisamba on 15 August 2009. Among other issues, maize marketing and trade policy in Zambia was discussed. The meeting noted that the continuation of ad hoc government marketing and trade policy was hampering the growth of the agricultural sector in terms crop diversification, regional marketing opportunities and crop productivity. In addition, the removal of the grain marketing council from the Agricultural Marketing Act proposal by MACO would render the proposed changes ineffective because without an independent board to monitor the sector then the status quo will persist. Stakeholders were urged to pressure for the inclusion of the council when the bill comes to the committee stage.
- **Fertilizer Value Chain:** ACF/FSRP helped to elevate Fertilizer Support Programme Reform as a high level policy issue: ACF/FSRP were central to helping organize a stakeholder Study Tour and to raising the public profile of the debate over needed reforms to the program. The various outreach activities done to highlight this issue has resulted in the government announcing some specific reforms for 2009/2010 agricultural season as follows:
    1. Increasing the number of beneficiaries from 200,000 to 534,000 essentially taking on board the recommendation to reduce the pack size.
    2. Reduced the amount of fertilizer given to farmers from 8 X 50 kg bags to 4 X 50 kg bags.
    3. Incorporated the creation of camp agricultural committee to involve chiefs and religious leaders in order to improve distribution transparency.
    4. The program name has been changed from Fertilizer Support Programme (FSP) to Farmers Input Support Programme (FISP).

The changes outlined in 1 to 3, when well implemented, have the potential to put FISP on a pathway towards positive benefits for needy smallholder farmers to be reached. This would help them primarily as direct consumers of the additional maize and other crops they need to produce. In general, reaching more needy rural households with an effective assistance package would greatly improve household-level food security in Zambia since so many smallholders are still not able to produce enough to adequately feed their own families. Some households even have to purchase maize and other staples if they have cash resources to allow this. Helping needy households become more self-sufficient in feeding themselves maize (and other crops) will also contribute to national-level food security since fewer rural families will be purchasing maize, thus leaving more of what is marketed for use by urban and remaining rural net buyers. The name change is a positive development as it indicates GRZ intentions over the longer-run to try to assist smallholders with a wider range of crops and agricultural inputs, including the strengthening of extension advice on topics such as management practices and conservation farming techniques to assist in raising yields for a broader set of crops, and helping to make it more profitable to use purchased inputs

*However, there* are a number of other reforms suggested by the FSP Study Team that are still under review and are thought to also be part of the solution to achieving the longer-run

full potential for programme improvement. For example, one of the most important of these recommendations still under review is to reorganize how the input subsidy is given-out in title and retrieved in-kind in order to remove potential negative effects of untargeted subsidies on private dealer incentives, and to achieve much greater growth in private agro-dealer sales and services for smallholders. Since there is overwhelming evidence that more smallholders currently obtain inputs such as fertilizer and hybrid seed from cash purchases at agro-dealers than from the FSP/FISP programme, there is need to expand and strengthen the private agro-dealer networks in Zambia in serving the entire smallholder farming community with timely and cost effective access to input use and practical commercial extension advice. ACF/FSRP also continue to emphasize the need to adopt an electronic voucher as a method for more cost effective targeting as well as a tool for additional stimulus to agro-dealer development. Based on existing experience in cotton growing areas with electronic payment transactions (SMS-based) over the past 2 - 3 years in tasks such as paying farmers for seed cotton sales, Zambia has a comparative advantage in the Southern Africa Region to design and implement an SMS based e-voucher system for helping to transfer and audit more efficient assistance to agreed upon targeted households. The e-vouchers would likewise be redeemed by farmer beneficiaries at authorized private agro-dealers, thereby also stimulating private sector agro-business development in rural areas. The new permanent secretary in MACO showed an interest to help move the voucher proposal forward before the start of the 2010/2011 agricultural season and requested ACF/FSRP to propose a detailed implementation structure and plan for inclusion into the 2010 budget. This has since been drafted and submitted to MACO.

- **ACF/FSRP facilitates active stakeholder involvement in GRZ Agriculture Budget Review:** By bringing empirical analysis to bear on budget trends and implications for agricultural sector development and conducting outreach on these issues, ACF/FSRP raised the level of public debate regarding agricultural sector budgetary priorities. This budget analysis is currently used in high-level policy dialogue among key government ministers, facilitated by ACF/FSRP, about public expenditure and how to achieve 6% agriculture sector growth as per NEPAD/CAADP development targets.
- **ACF/FSRP Livestock Sector Planning:** Work started with key stakeholders to review problems and begin dialogue on ways forward to improve the livestock sector performance. This has included using Supplemental Survey and Crop Forecast information to develop the first ever survey based estimate of livestock population in Zambia.
- **Cassava Value Chain:** Research and outreach on cassava, and support to the Task Force on Accelerated Cassava Utilization (ACU) during this and prior years has been aimed at strengthening private sector commercialization of cassava and gaining broad-based input into planning by various stakeholders for sustainable development of the cassava value chain. ACU had the opportunity to meet with the new minister of Agriculture Hon. Brain Chituwo to brief him on key issues pertaining to cassava production and marketing in Zambia and how the government can assist improve this value chain.
- **Horticulture Value Chain:** This year marked the third one in which FSRP has been collecting wholesale trade flows and retail and wholesale prices data and a rich database has been created, consisting of data on 34,039 lots of tomato, rape and onion entering the main wholesale market in Lusaka (Soweto) and 16,867 wholesale/first seller and 10,537 retail price observations for these commodities. This rich data base has been and will for a long time be a source of analysis of the horticulture market dynamics which will contribute to the development of the horticulture value chains.
- **Renewed commitment to CAADP:** As a result of the High Policy Level dialogue meeting, there has been renewed commitment from Government on the CAADP process and FSRP



was asked to provide assistance in making the next round of national development planning process compatible with the CAADP framework. Tentatively, the Zambia CAADP compact will be signed on November 12<sup>th</sup> 2009. The ACF/FSRP outreach team continue to interact with relevant stakeholders in MACO, COMESA, Donors and State House to keep the momentum going.

#### ***4.2 Capacity Building***

- The FSRP Team provided technical support to the MACO and CSO CFS data cleaning team : A team of 22 people (16 males and 6 females). This exercise helped the team to appreciate the need for treating data collection and cleaning as a process/chain that requires all links to be strengthened. Otherwise, if there is a weakness on any one of the chain link then the data quality will be comprised and a lot of time would be required to clean the data for it to be of acceptable quality. The follow-on surveys that CSO and MACO will implement will benefit immensely from the knowledge and skills the team acquired.
- FSRP assisted 3 MACO Policy and Planning staff (3 males) to generating more accurate estimates for Zambia's human consumption, industrial utilization, and stock levels for food grains and tubers. In addition, FSRP helped this unit to prepare a supply and demand estimation worksheet for food grains and tubers (the so-called food balance sheet) that calculates estimated surpluses or deficits for the various commodities. This assistance will enable MACO to make reliable crop forecast and utilization estimates.
- FSRP provided technical assistance to the discussion that resulted into CSO and MACO reviewing the weighting procedures for the CFS crop estimates. A total of 6 people (all male) benefited from this interaction. The new and improved weighting scheme will be used for past and all future estimates.
- Due to high staff turnover, FSRP was requested by MACO and CSO to train new staff to use SPSS software for data cleaning and analysis. In September, FSRP conducted 2 SPSS training courses (introductory course and syntax writing course) to benefit 13 males and 6 females from the two institutions. These courses will continue to enhance MACO and CSO data cleaning and analytical capacity.

#### ***4.3 Improving the Substantive Content of Agricultural Policy Debates***

On a series of occasions over the reporting period, FSRP has responded to specific requests in Zambia for empirical input on key policy issues:

- **Stimulating debate on the agricultural sector implications of the 2009 budget:** In February, 2009, the ACF/FSRP presented an analysis of both spending and taxation provisions of the 2009 budget to contribute to public discussion between agribusiness, farmers and government at a breakfast workshop for stakeholders at the Pamodzi Hotel. The presentation featured on-going ACF/FSRP analysis of the agricultural sector budget allocations in Zambia, and put into perspective the relative decrease in the GRZ budget for agriculture in 2009 if actual spending figures are used (including supplemental funding) rather than announced (excluding supplemental funding) . Also, the presentation highlighted the continued priority in this budget for financing fertilizer and maize market subsidies at the expense of more fundamental public good investments that are missing and are required to strengthen the building blocks for productivity increases in the Zambian agricultural sector.
- **The need to reform the Zambian fertilizer support programme:** As summarized above ACF/FSRP helped to elevate Fertilizer Support Programme Reform as a high level policy

issue. Some reforms to the program though not complete are in the process of being implemented for 2009/2010 agricultural season

- **The Cotton Board:** Despite the failure by parliament to pass the revised Cotton Act, stakeholders managed to get MACO approval to seat the Board under the existing Act. By April the Board 2009 had been seated, and has named FSRP a non-voting advisory member of the Board, as a means to ensuring regular analytical input, and in recognition of FSRP's history of such work.
- **Challenges of targeting assistance to smallholder households:** Responding to interests from MACO and other Zambian and donor stakeholders in designing more effecting approaches to assisting different groups of small and medium scale farmers in Zambia, ACF/FSRP researchers continued to use the Zambian rural household data sets to identify relevant categories of resource poor smallholder farmers and their characteristics. A follow up study to understand on poverty dynamics in Zambia is currently on going. This study involves revisiting a few households from the national representative sample to obtain more detailed information about the household poverty status. Preliminary results from this study will be available by end of Q1 2010.
- **Maize pricing in Zambia :** FSRP provided timely information to government, FRA and other relevant stakeholders on dealing with the 2009/10 maize pricing issues by providing information to aid the discussion. In particular, the project provided information on maize supply and demand in the Southern Africa region for the 2009/10 marketing season and why it was important for FRA to set policies consistent with protecting some potential export options. Issues to consider when dealing/discussing the maize indicative price or rather maize floor price for marketing season 2009/10, stocking up of FRA strategic reserves, maize production costs and ZNFU and private sector participation were highlighted in a policy note on "[The Challenges of FRA Maize Pricing](#)" which was subsequently picked up by the Zambia Economist and published in their July 2009 Issue.
- **Working with a Task Force on Acceleration of Cassava Utilization:** FSRP staff continued this year in the role of the Vice-chair of the cassava task force (ACU). Contributions to the ACU assist in the strengthening of private sector commercialization of cassava and gaining broad-based input into the value chain by various stake holders.

## 5. Description of FSRP's Main Activities - October 2008 to September 2009

### 5.1 Public Investment Allocation for Promoting Agricultural Growth

#### *National Agricultural Expenditure Accounts*

- FSRP and ACF researchers reviewed the government yellow budget book, analyzing planned public agriculture expenditure, and participated in the ACF Annual Agricultural Budget Review Workshop held on Feb 4, 2009. Presentations were made to discuss the proposed budget.
  - [Discussing the 2009 National Budget for Zambian Agriculture. ACF/FSRP Research Staff.](#) Presentation by Antony Chapoto and Michael Weber at the Agricultural Consultative Forum Annual Stakeholders Breakfast Budget Workshop, Pamodzi Hotel, Lusaka, Zambia. 04 Feb. 2009
  - [Background Materials to Support the Feb 4, 2009 Budget Analysis Presentation: Small and Medium-Scale Household Income and Other Characteristics by Quintile of Household Per-Capita Land Use - 2004.](#) Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber.

- Local press coverage of 2009 agriculture budget review discussions
  - [Discussions with Minister of Agriculture at 2009 ACF Ag. Budget Workshop](#)
  - [Closer Look at 2009 Agricultural Budget in Zambia](#). Zambia Daily Mail.
  - [Zambia Maize Subsidy Not Sustainable](#) - ACF/FSRP (Post-Feb 16, 2009)
- [Public Agriculture Spending: Trends & Key Trade-offs](#). Jones Govereh
- FSRP completed the working paper: [Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implication for Agricultural Productivity Growth](#). Jones Govereh, Emma Malawo, Tadeyo Lungu, Thom Jayne, Kasweka Chinyama and Pius Chilonda. Working Paper No. 36. February 2009.
- FSRP prepared the paper **“Trend Analysis and Mapping of Public Agricultural Spending in Zambia 2000 - 2008”** using audited accounts of expenditure to track expenditures from 2000 – 2006. For 2007 and 2008, parliamentary approved appropriations were used. This was the first time expenditures included forestry and resettlement programs run by the Ministry of Tourism, Environment and Natural Resources and Office of the President, respectively. Such analysis provided some mid-course feedback on whether (and how) government of Zambia is moving toward meeting her CAADP commitments.
- FSRP staff continued to monitor and update information on agricultural investments, growth and poverty trends in Zambia. The purpose of the activity is to update existing data for developing baseline indicators for monitoring public spending for agriculture and the rural sector, performance of the sector, and trends in rural welfare (income and poverty).
- During the year under review, there was renewed commitment from Government on the CAADP process and FSRP was asked to provide assistance in making the next round of national development planning process compatible with the CAADP framework. Nijhoff continued work on CAADP and related Zambia agriculture budget work.
- ACF/FSRP organized a High Policy Level dialogue meeting with ministers at Protea Lodge, Chisamba. Issues discussed included, the stalled CAADP process, fertilizer support program, maize marketing and trade policy in Zambia. A number of follow up meetings were held and we have seen the CAADP process reactivated and moving forward. Tentatively, the Zambia CAADP compact will be signed on November 12<sup>th</sup>. Nijhoff and Kabaghe continue to interact with relevant stakeholders in MACO, COMESA, Donors and State House to keep the momentum going. Resulting from this meeting, the ACF/FSRP were requested to propose a detailed implementation structure and plan so the proposed fertilizer support program reforms could commence in the 2010/2011 agricultural season.
- Chapoto, Jayne and Weber collaborated with Dr. Gelson Tembo, Lecturer from the University of Zambia on a paper entitled **“Fostering Agricultural Market Development in Zambia”**. Presented at the Zambia National Symposium, Harnessing the Potential of Agriculture to Meet the Increasing Demands from a Growing Population at the University of Zambia, Lusaka, Zambia. April 7-8, 2009. Presentation has been posted on the FSRP website. The presentation by Dr. Tembo attracted some local press coverage and a report can be found at <http://www.lusakatimes.com/?p=10911>. The paper has been published as an FSRP working paper.
- FSRP in Q2, 2009 initiated preliminary work on the study of returns to research on sweet potato and cassava, working with MACO’s Crop Forecast Survey, to include sufficiently detailed varietal information to permit estimates of improved variety adoption for both crops. Later in the quarter, in June 2009, Crawford and Haggblade travelled to Lusaka and Luapula. Following discussions with relevant stakeholders, FSRP has agreed to conduct this study in collaboration with ZARI and FoDiS. The objective is to evaluate the rate of return on past cassava and sweet potato research and extension. ZARI and FoDiS conducted field studies of yield gains under improved varieties between August and October 2009. A draft report will be circulated in the second quarter of 2010 and outreach activities will include presentations to ZARI, ACU Task Force and other stakeholders.
- FSRP also commenced in Q2, 2009 commenced data collection exercise for work on measuring the impact of rural roads investment on smallholder livelihood in Zambia. In order to do household/village analysis with this data, FSRP is collaborating with the Road

Development Fund and CSO mapping department to incorporate road investment information into the CSO/FSRP supplemental survey data base. A draft report will be circulated in the first quarter of 2010.

- A new subheading to the ACF/FSRP website was completed to contain as downloadable documents the output and background documents for the returns to research on sweet potato and cassava.

### ***Returns to Alternative Agricultural Expenditures***

- FSRP researchers continued to cultivate important working relationship during the 4<sup>th</sup> Q of 2008 with colleagues in the Ministry of Finance and National Planning (MoFNP). This is a group conducting, in collaboration with CSO, Bank of Zambia and other colleagues, a macroeconomic model to eventually evaluate the impact of alternative investment options by GRZ in various sectors.
- FSRP presented findings on the payoffs to alternative agricultural expenditures at several local policy events:
  - Zambia Agricultural Policy: Finding a Balance Between Public Facilitation & Private Sector-Led Growth. Jones Govereh and Michael Weber. Food Security Research Project. Presentation at a Mini-Workshop on Agricultural Policy in Zambia, Chrismar Hotel, 7 Oct, 2008.
  - Information Toward Goals of Poverty Reduction, Food Security, Enhanced Productivity and Income Growth for Small-scale Farmers in Zambia – Opportunities and Challenges. ACF/FSRP Presentation By Tadeyo Lungu, Augustine Muteleksha, Antony Chapoto, Margaret Beaver and Michael Weber. MACO/SIDA ASP Old and New Workshop, Chrismar Hotel, Lusaka. Dec 2-3, 2008.
- FSRP staff conducted informal discussions with Zambian policy makers as follow up at the annual ACF Budget Review Breakfast.
  - Zambia Maize Subsidy Not Sustainable - ACF/FSRP (Post-Feb 16, 2009)
  - Work continued in this area as part of the fertilizer subsidy programme review activities in this quarter. Informal discussions on this topic were held with the Ministry of Finance FSP study team member. (See section III.5 (Fertilizer Value Chain) for details.

## ***5.2 Productive Assets: Options for Sustainably Increasing Productivity and Incomes***

### ***Land Access, Agricultural Growth, and Poverty Dynamics in Zambia:***

- The study on “Access to Land, and Poverty Reduction in Rural Zambia: Connecting the Policy Issues” was finalized and updated on the website as working paper number 34. FSRP continued to use this output in various outreach activities with relevant stakeholders. Issues of how constrained access to land is affecting the poverty reduction objectives of the GRZ and policy strategies for addressing these land constraints was a topic of discussion in the Ministers retreat in August 2009. The report can be downloaded at: [http://www.aec.msu.edu/fs2/zambia/wp\\_34.pdf](http://www.aec.msu.edu/fs2/zambia/wp_34.pdf). A Policy Synthesis” was also completed and posted to the FSRP web site.
- FSRP in-country researchers (Chapoto, Weber and Lungu) worked with ACF to refine, distribute and discuss the smallholder categorization tables developed to examine various rural household socio-economic characteristics according to household land and assets access attributes.

### ***Alternative Strategies for Maintaining Soil Fertility:***

- Work continued on a linear programming model of CF in order to measure the prospective gains to smallholder income by adopting CF and shifting peak season land preparation labor

to the dry season. In Q3 2009 the FSRP team received detailed feedback from the CFU. In response to their suggestions, the team is conducting additional analysis of herbicide use alternatives. The team expects to finalize this report during Q4 2009.

### *5.3 Labor Supply, HIV/AIDS, and Agriculture*

- Chapoto and Jayne started working on two new studies to examine the longer-run impacts of HIV/AIDS on smallholder agriculture and rural livelihoods. These studies look at whether the relationship between poverty and mortality has been changing in Zambia and the longer run impacts, adjustments, and potential recovery by rural farm households to prime-age morbidity and mortality in Zambia. Outreach activities from this work will include presentations at ACF/ FSRP organized workshop on AIDS, and Rural Livelihoods.
- Chapoto, Jayne and Mason condensed their FSRP working paper **“Security of Widows’ access to land in the Era of HIV/AIDS”** into a journal submission which was recently accepted by Economic Development and Cultural Change. This study will be presented to Zambian policy makers in a workshop on HIV/AIDS and agriculture in Lusaka being planned for February 2010.
- Work on impacts of food aid on AIDS afflicted households gathered momentum in Q2 2009 following the cleaning of the 3<sup>rd</sup> Supplemental Rural Survey data . A draft working paper is expected in the fourth quarter and will be circulated to relevant stakeholders for comments. Results from this study are expected to be featured during the proposed FSRP HIV/AIDS workshop in February, 2010.
- A report on Cross country work on **“Characteristics Associated with Prime-Age Mortality in Eastern and Southern Africa: evidence from Zambia and Kenya”** was finalized and has been published as a MSU International Development Paper and a variant of this study has been submitted to World Development for publication, and is awaiting reviewers’ comments.
- Mason presented the paper, **“A Test of the New Variant Famine Hypothesis: Panel Survey Evidence from Zambia”**, co-authored with Jayne, Chapoto, and Robert J. Myers (Michigan State University faculty member), at the XXVII International Conference of Agricultural Economists in Beijing, China in August 2009. A revised version of the FSRP working paper of the same name was accepted for publication in September 2009 by World Development. The paper will appear in a spring 2010 issue of the journal.

### *5.4 Natural Resource Management*

- Richardson and Tschirley continued to work with graduate student Ana Fernandez on an analysis of the effect of game management areas (GMAs) on rural household welfare. The analysis measured the effect of GMAs on household income, self employment, wage employment, and the value of crop damage. Preliminary findings suggest that households living in prime GMAs (with high levels of wildlife stock and diversity) benefit from higher levels of income and employment than households living in non-GMA rural areas, but are also more likely to suffer crop losses from wildlife damage. A policy synthesis entitled **“The Impacts of Wildlife Conservation Policies on Rural Household Welfare in Zambia”** (No. 33, available at <http://www.aec.msu.edu/fs2/zambia/ps33.pdf>) as well an FSRP Working Paper entitled **“Wildlife Conservation in Zambia: Impacts on Rural Household Welfare”** (co-authored with Dr. Gelson Tembo, University of Zambia) have been produced. One manuscript from this research has been submitted to a journal for publication review, and another manuscript is currently in progress. An additional Working Paper and 1-2 additional policy syntheses from this research are planned to be produced in 4Q 2009.
- Richardson will travel to Lusaka in 4Q 2009 to participate in an outreach symposium related to the GMA research.

- Richardson continued an examination of the determinants of household income from fuel wood and non-timber forest products and an analysis of urban household energy use.

### ***5.5. Marketing and Trade: Policies Affecting Input and Output Markets***

#### ***Maize Value Chain:***

- Jayne made a presentation on World Food Prices and the Political Economy of Food in Eastern and Southern Africa at Michigan State University. Center for the Advanced Study of International Development, CASID. Women and International Development (WID) Program, Center for Gender in Global Context. November 7, 2008. The presentation has been posted on the MSU/FSRP website.
- FSRP/MATEP met with ZNFU analysts (John Fynn) in the last quarter of 2008 to review the current maize supply and demand situation. This review was to share current information and ideas with ZNFU in the context of the report that was being prepared by a ZNFU facilitated working group on rising prices in Zambia.
- Weber participated in an ACF sponsored meetings to review SADC regional grain reserve proposal.
- FSRP/MATEP continued to interact with stakeholders in trying to gather more information about how the government of Zambia is dealing and responding to the domestic rising retail maize grain and maize meal prices as well as provide guidance on how to deal with the crisis. In the month of January 2009, Grain Trades Association of Zambia (GTAZ) Chairman and Secretary General visited with FSRP to give an update and seek counsel on their predicament regarding FRA reluctance to buy their stocks but rather give millers preferential treatment. FRA, with pressure from various groups and politicians, had begun to sell subsidized maize to millers and arranged imports of 35 000 metric tones of non-GMO maize. Unfortunately, up until end of January no agreement on the price at which FRA would buy traders' stocks had been yet reached but discussions to buy expensive excess millers maize stocks before selling it back to them at subsidized prices were concluded. Traders remained optimistic that FRA would agree to buy traders stocks. This fact-finding work by FSRP was necessary to simply understand the policy decisions that are being taken as the first step towards being able to analyze their impacts.
- FSRP/MATEP started to initiate discussion for the sector to look into the future, for example urging the industry and government to look at the future implications of the current maize fiasco. For example, how would FRA sales of subsidized stocks affect the market of early maize crop that was soon to come on the market; how would FRA deal with the issue of strategic reserves given their limited current stocks; what would be the size of the main maize crop coming in April-May; how much was FRA likely to buy (depends on the size of the budget allocation); would traders be motivated to aggressively go out and buy grain from farmers as they did last year given the current stocks they are holding?
- The draft international development working paper by Jayne et al on, **“Rising World Food Prices and their Implications for Food Security Policy in Eastern and Southern Africa”** continued to attract a lot of attention. For example, IRIN published an article on Malawi/Zambia food crisis drawing mainly from this study. The paper is also getting a great deal of attention in the Malawian press. A short updated policy synthesis on the current maize market situation in Zambia is being prepared from this larger regional reporter.
- FSRP/MATEP continued to monitor the maize grain and mealie meal prices in Zambia through interaction with stakeholders. Despite the government subsidy to millers, maize grain prices remained high. For example, in Lusaka, the retail maize grain prices in January 2009 was K1756/kg, February 2009 K1803/kg, and March 2009 K2017/kg. The new crop started coming on to the market in March 2009 though moisture content is still high. There were reports that farmers in Southern Province were selling early maize grain at K25 000 per 50kg bag (approx K500/kg), whilst some farmers in Chipata in the Eastern Province were said to have found a lucrative market in Malawi selling their grain at 95 000 Kwacha per bag (about K1819/kg). These reports provided FSRP/MATEP with yet another opportunity to

provide wise counsel to MACO and the Stocks Committee not to take this as a threat but a market opportunity that should be harnessed. The current thinking was to set a very high floor price to discourage sales of grain to Malawi.

- FSRP/MATEP provided technical support to MACO Early warning unit to prepare for the Crop Forecast Survey (CFS) in the early months of 2009. It worked on a maize model to estimate projected maize price levels the following marketing season in Zambia in light of the most recent CFS production forecasts and estimates of national maize demand. These price projections were shared with MACO to provide guidance on proposed FRA activities to lessen the potential for disruptions in the functioning of the maize marketing system in the 2009/10 marketing year.
- FSRP Team spent the first half of May helping MACO and CSO clean the CFS data before the announcement of the crop forecast by the Minister of Agriculture. The exercise was time consuming because of many issues regarding data collection and entry which affected the quality of the data. As a result of FSRP's continued efforts in highlighting the problems with the MACO/CSO data weighting files due to enumerator under listing CSO finally agreed to review the weighting procedures and updated the weights for 2008/9 crop estimates. FSRP encouraged dialogue between the stocks committee and MACO early warning unit responsible for the CFS and proposed a lock up session to discuss and agree on the estimates before the minister announces the crop estimate and food balance sheet. The estimates were shared with GTAZ and ZAMACE, and FSRP encouraged MACO to disseminate this information widely to help FRA and private buyers have ideas as to where to go to get maize tonnage. Jan Nijhoff is assisted MACO with generating more accurate maize grain utilization estimates which are used in the generation of the national food balance sheet.
- Chapoto, Jayne and Weber collaborated with Dr. Gelson Tembo, Lecturer from the University of Zambia on a paper entitled "[Fostering Agricultural Market Development in Zambia](#)". Presented at the Zambia National Symposium, Harnessing the Potential of Agriculture to Meet the Increasing Demands from a Growing Population at the University of Zambia, Lusaka, Zambia. April 7-8, 2009. The presentation by Dr. Tembo attracted some local press coverage and a report can be found at <http://www.lusakatimes.com/?p=10911>
- FSRP outreach team met with the Minister of Agriculture and Cooperatives, Dr, Brian Chituwo to provide him with some basic information on: likely maize supply and demand in the Southern Africa region in the forth-coming marketing season; why it was important for FRA to set policies consistent with protecting some potential export options, and to especially, not announce any FRA indicative prices until the crop forecast is finished and balance sheet announced.
- Mason et al produced a draft report on "**Are Staple Foods becoming more expensive for urban consumers in Eastern and Southern Africa? Trends in Food Prices, Marketing Margins, and Wage Rates in Kenya, Malawi, Mozambique and Zambia**" which was presented at the Institute for African Development Conference, "**Food and Financial Crises and their Impacts on Achievement of the Millennium Development Goals in Africa**" on May 1-2, Cornell University, New York. A final version of this paper was also published as an FSRP working paper:
  - [Are Staple Foods Becoming More Expensive for Urban Consumers in Eastern and Southern Africa? Trends in Food Prices, Marketing Margins, and Wage Rates in Kenya, Malawi, Mozambique, and Zambia](#). Nicole Mason, T.S. Jayne, Cynthia Donovan, and Antony Chapoto. IDWP 98. June 2009.
- Weber, Kabaghe and Chapoto met with the Chief Executive of FRA to share with him some insights on issues to consider when dealing/discussing the maize indicative price or rather maize floor price for marketing season 2009/10, stocking up of FRA strategic reserves, maize production costs and Zambia National Farmers Union (ZNFU) and private sector participation. Most of the stakeholders were happy with the announcement of FRA buying price of K65, 000 per 50kg bag. Unfortunately, ZNFU still persists that this price is low compared to farmers production costs and is advocating for an increase in the floor price up

to K85,000. We trust that the notes FSRP provided to the FRA Chief Executive will continue to be handy as the issue of maize pricing is being discussed.

- Chapoto shared some insights from the cross-country price instability study at the FAO Regional Expert consultative meeting on the use and impact of trade and domestic policy interventions on cereal value chain in Eastern and Southern Africa held in Tanzania, June 3-4, 2009. [Measuring the impacts of trade barriers and market interventions on maize price instability: Evidence from Eastern and Southern Africa](#). A. Chapoto and T. S. Jayne. Presentation at the Regional Consultation Workshop on: “The Use and Impact of Trade and Domestic Policy Interventions on Cereal Value Chain Stakeholders in Eastern and Southern Africa”. Dar es Salaam, Tanzania, June 3-4, 2009. ACF/FSRP organized a High Policy Level dialogue meeting with ministers at Protea Lodge in Chisamba on 15 August 2009. Among other issues, maize marketing and trade policy in Zambia was discussed. The meeting noted that the continuation of ad hoc government marketing and trade policy was hampering the growth of the agricultural sector in terms crop diversification, regional marketing opportunities and crop productivity. In addition, the removal of the grain marketing council from the Agricultural Marketing Act proposal by MACO would render the proposed changes ineffective because without an independent board to monitor the sector then the status quo will persist. Stakeholders were urged to pressure for the inclusion of the council when the bill comes to the committee stage.
- Started work on impacts of FRA operations on smallholder livelihoods with data collection from FRA and other sources and a draft working paper is expected by the end of the 4<sup>th</sup> quarter.
- As part of the maize value chain study, Dingi Banda from MACO is working on “**distributional effects of maize price levels on smallholder welfare**” for his M.S thesis, though a working paper will be produced as well
- Chapoto interacted with WFP, Purchase for Progress (PFP) Monitoring and Evaluation department. The M & E officer wanted some input on the current maize situation in Zambia and some thoughts on whether WFP procurement via ZAMACE was a good idea given the fact that the program should benefit small-scale farmers. Main highlights of this discussion were:
  - Zambia had a surplus according to the CFS 2009 and retail market maize prices in August ranged from were 40 000 to 70 000 per 50kg bag suggesting lower farm gate prices. The unfortunate development is that government has deviated from its promise to buy limited quantities for strategic reserve by announcing a more than double FRA supplemental allocation. Limited maize exports have been allowed. Utilizing the market by PFP was the best approach and benefits will trickle to small holder farmers especially if the problems with storage are addressed (e.g. through warehouse receipts).
  - FSRP produced a policy synthesis on “[Marketing Policy Options for Consumer Price Mitigation Actions in the 2008/09 Maize Marketing Season in Zambia](#)”. This policy synthesis was written to stimulate discussion on how to effectively deal with the impending shortage of maize grain during the following lean season between November 2008 and March 2009.
- FSRP/MACO policy synthesis on “[Marketing Policy Options for Consumer Price Mitigation Actions In the 2008/09 Maize Marketing Season in Zambia](#)” continues to get some visibility, see <http://zambian-economist.blogspot.com/2008/11/to-import-or-not-to-import-2nd-edition.html>.
- A short updated policy synthesis on the current maize market situation in Zambia was prepared from the report on “**The 2008/09 Food Price and Food Security Situation in Eastern and Southern Africa**”. The policy synthesis highlighted concrete steps that can be taken when Zambia has a future production shortfall to avoid the situation experienced in 2008/09 when food prices surge over import parity levels.



- Weber produced a draft policy brief on changes in small and medium –scale household maize production and marketing patterns between CSO/MACO/FSRP National-Level Supplemental Survey Periods 2004 and 2008.
- Govere, Jayne and Chapoto published a working paper on [Assessment of Alternative Maize Trade and Market Policy Interventions in Zambia](#).
- Jayne, Chapoto and others completed a draft report on assessing the impact of the rising food price situation in 2008/09 on food insecurity and changes in anticipated 2009 production patterns in Zambia and the southern Africa region more generally. The report has been posted on the MSU website as a draft International Development Working Paper.
- Chapoto and Jayne completed a draft working paper on, **“Effects of Maize Marketing and Trade Policy on Price Unpredictability in Zambia”**.
- Given the important new developments in Zambia and other countries in the region, Jayne et al, updated the working paper on **“The 2008/09 Food Price and Food Security Situation in Eastern and Southern Africa”** – and parts of this regional report have received media attention in Malawi, see: <http://www.alertnet.org/thenews/newsdesk/IRIN/c58f6508f060f2726f83e2826db88147.htm>.
- Jayne and Chapoto produced a working paper on analysis of the impacts of FRA operations and government trade policies on the level and volatility of maize prices in Zambia. Results of this study indicate that certain government trade policy actions, while intending to stabilize maize prices, actually appear to destabilize them, e.g., export bans and delays between announcing intentions to import and actual timing of import. These findings will be shared and discussed at future outreach events in Zambia to apprise MACO colleagues of how certain trade policy changes could help stabilize maize prices, especially in years of production shortfalls. A report was completed from this work:
- [Effects of Maize Marketing and Trade Policy on Price Unpredictability in Zambia](#). Antony Chapoto and T.S. Jayne. FSRP Working Paper No. 38. June 2009.

#### ***Cassava Value Chain:***

- FSRP during the year under review continued to interact with the cassava sector stakeholders and contributed to several sector planning meetings including cooperation with planning of ACU/ITC (International Trade Centre) efforts in Zambia to develop a cassava sector development plan. In Q1 2009, Kasweka Chinyama and the ACU members met the new minister of Agriculture Hon. Brain Chituwo and briefed him on the ACU works. The ACU encouraged the minister to be actively involved in promoting the development of the cassava sector in Zambia, similar to the interest the government has on maize. The ACU also mentioned to the Minister the possibility of including 10% cassava flour in every bakery product just like it is done in Nigeria. The Minister was very happy with the presentation and said that it was a pity that the ACU met him after the budget for the year had already been made, but he had taken note of the points the ACU had come up with and he said that he will look into the issues discussed with MACO staff. He also made a request that the ACU should continue briefing him through out the year.
- At the request of Caritas Zambia, the FSRP team, Mike Weber and Kasweka Chinyama, attended a Media Launch by Caritas Zambia, in November 2008. Caritas Zambia has been contracted by FAO to do a nation-wide media campaign on the sensitization of the utilization of cassava nationwide. FAO in collaboration with MACO is implementing a project called “Enhancing Food Security in Cassava – based Farming Systems.” The overall objective of this project is to increase the incomes of rural farmers through market access and commercialization of cassava. The Deputy Minister of Agriculture was present and listened very attentively to the presentation made by the ACU.
- In December, 2008 a journal article version of FSRP Working Paper No.21, on the Acceleration of Cassava Utilization Task Force, was accepted for publication in the Journal of Development Studies. The article was published in 2009.
- In February 2009, FSRP attended a FAO workshop to review the impact of the FAO project called “Enhancing Food Security in Cassava – based Farming systems.” This project is

implemented in Mansa, Serenje and Samfya. The project was coming to an end, hence the FAO representatives needed input from ACU and other cassava stakeholders to see how the project can improve in the next phase.

- In March 2009, FSRP attended a meeting at FAO under the ACU to brief the FAO representative from Rome, who is a Food Technologist on the works of the ACU. The FAO Representative was in Zambia to give training to the Zambian rural Cassava Farmers on cassava processing.
- Chinyama and Weber participated in the PAM/FAO handover ceremony of the women's cassava processing and marketing center in Kanakantapa. This included preparation and baking of cassava-cheese bread samples for participants at this ceremony.
- Lungu, Chinyama and Weber prepared and circulated for review an ACF/FSRP Policy Brief on **“Changes in Small and Medium-Scale Household Cassava Production and Marketing Patterns Between CSO/MACO/FSRP National-Level Supplemental Survey Periods 2004 and 2008”**. The document was presented for comments at a ACU/ITC planning meeting in Q3 2009 in Lusaka. Feedback has been obtained and the document will be finalized in Q4, 2009 after additional analysis is done on household-level area planted and other variables.
- Weber and Longabaugh worked with FSRP researchers Haggblade and Crawford to revise the FSRP web site to enhance and expand materials in the **Zambia Specific Work and Background Resources Directories**.
  - [Study of Benefits of Improved Cassava and Sweet Potato Varieties in Zambia](#)
  - [Cassava Value Chain Development in Southern Africa](#)
- Chinyama continued to work with ACU, ITC and FAO in the developing of a cassava strategy in Zambia. ITC organized a 2 day workshop in August 2009, involving stakeholders from both the public and the private sector including financial institutions. The workshop was opened by the Minister of Agriculture and was closed by the Permanent Secretary in the Ministry of Commerce Trade and Industry. ACU is finalizing the workshop proceedings which will be presented to the Minister of Agriculture soon.
- Chinyama has been invited on behalf of FSRP to sit in a committee under FAO to launch the program to include a 2.5 Kg cassava meal sachet in every 25kg bag of maize meal by a milling company on the Copperbelt in October 2009. Preparations though started in August and the committee is working with different stakeholders in order to sensitize the public on this development. FAO contracted ZNFU radio to do the publicity.
- FSRP continued efforts of market monitoring prices, volumes, and sources of cassava in Lusaka and the Copperbelt, which are the biggest markets of cassava in Zambia. This has provided vital information on the trends in prices and volumes. Collection of prices on sweet potatoes continued as well, both as an input into the returns to investments in cassava and sweet potatoes research study and to permit future analysis of staple food markets and opportunities for consumer substitution among food staples.
- Martin Chiona, of ZARI, has led a field team collecting data on crop yields for cassava and sweet potato under farmer conditions for local and improved varieties. Write-up of these results is expected during Q1 of 2010.
- In response to a request from the ACU Task Force, FSRP has agreed to pull together information on the economics of cassava production and processing. This effort will involve interaction with Zambian farmers and processors. But given the low levels of processing domestically, it will also require processing information from more advanced cassava processors in the region (South Africa, Mozambique) and internationally (particularly Brazil and Thailand). We expect this study to be completed by Q4 2009.

### ***Horticulture Value Chain***

- *Wholesale market monitoring:*

- Continued the collection and processing of (a) sub-hourly prices for tomato, rape, and onions three days per week in Soweto market, (b) individual lot volumes for every lot entering Soweto market for those same days, (c) the geographical origin of each lot (specific area within a district), and (d) price data in Chilenje open air market and Shoprite and Melissa supermarkets twice per week. Developed conversion factors for various fruits and vegetables in Lusaka for use in the project's various surveys data analysis.
- Work on a brochure with good quality pictures of different standards of tomato, rape and onion has continued and will be discussed with stakeholders. This brochure will be used to raise awareness of quality standards among farmers and traders, at the same time that prices are reported on the basis of these standards once transmission of SMS prices commences.
- *Tomato value chain*: Work involving characterization of tomato production and marketing system serving Lusaka and comparative analysis of Soweto price behavior and assessment of price variability on the level and variability of farmer returns, has been completed as Ms. Mukwiti Mwiinga's M.S. thesis. Additional work on tomato price variability in Zambia has continued and will be presented as an FSRP Policy Synthesis.
- *Mobile phone based horticultural price and supply information system*: Implementation of this market information system by ZNFU delayed due to unexpected circumstances regarding funding. Consultations have continued with ZNFU and the union is committed to this activity and will implement it as soon as funding is in place. In the mean time FSRP/MATEP has continued transmitting price and supply data to ZNFU for testing purposes.
- *Horticultural price dynamics and trade flows*: Hichaambwa completed a first draft of a working paper entitled "**The Structure and Behavior of Vegetable Markets Serving Lusaka**". The analysis looks at importance of vegetables (tomato rape and onion) in consumption budgets of Lusaka households, wholesale supply characteristics, main market flow channels and price behavior.
- Mukwiti Mwiinga and David Tschirley participated in a conference on "**Socio-Economic research in vegetable production and marketing in Africa**", organized by ICIPE in Nairobi, Kenya. The two presented work from Ms. Mwiinga's M.S. thesis and are working now to develop an FSRP Working Paper as well as a chapter for publication in a CABI Science monograph.
- Based on work with Hichaambwa and other colleagues from MSU and Kenya, Tschirley presented a paper entitled "Modernizing Africa's Fresh Produce Supply Chains without Rapid Supermarket Takeover: Towards a Definition of Research and Investment Priorities" at the conference "Towards priority actions for market development for African farmers", sponsored by International Livestock Research Institute, Nairobi. May 13-15, 2009 and will also be put out as an FSRP Working Paper. The presentation can be downloaded at:
  - <http://www.aec.msu.edu/fs2/zambia/index.htm#pp> or
  - <http://www.aec.msu.edu/fs2/zambia/presentations.htm>

### *Cotton Value Chain*

- Stephen Kabwe made a presentation on the "**Effective Public-Private Coordination in Zambia's Cotton Sector: Deliberations on the Cotton Act**" at an outreach meeting organized for the members of the Committee on Agriculture and Lands by ACF/FSRP. The presentation highlighted the cotton sector's tendency towards boom and bust periods, and underlying causes of this behavior were explored. The presentation was meant to inform participants regarding the importance of the cotton sector in Zambia and the particular challenges that it faces, part so that amendments to the 2005 Cotton Act could be passed when Parliament opened later on.

- Stephen Kabwe participated in the International Cotton Advisory Council’s annual meeting as part of the official Zambian delegation in Ouagadougou Burkina Faso. The theme of the conference was “Technologies for Cotton Development”. For further information and a statement from the ICAC secretariat, see:
  - [www.icac.org/meetings/plenary/67\\_ouagadougou/documents/english/e\\_statement\\_2008.pdf](http://www.icac.org/meetings/plenary/67_ouagadougou/documents/english/e_statement_2008.pdf)
- Stephen Kabwe attended a meeting at State house where CAZ and the Ginners presented to Hon. Kapita (Presidential Aid for Special Projects) the issues affecting the cotton sector in Zambia, along with a draft proposal for incorporating ginning companies into the distribution of FSP fertilizers to cotton farmers. Hon. Kapita was please with this proposal and asked the team to write a proposal and submit it to State House. Stephen Kabwe, with input from David Tschirley, then worked with CAZ and the ginners to write the proposal in the context of how cotton ginners could participate in a reformed FSP that more effectively promoted the development of private fertilizer markets. This effort drew on intensive work by FSRP/MATEP on fertilizer policy reform in the country. The proposal was submitted to the Ministry of Agriculture and State House for consideration.
- *Work on the Cotton Board’s Smallholder Outgrower Information System:* This work has involved three elements:
  - Stephen Kabwe attended a meeting at CAZ where the IT personnel from CAZ and a representative from the company that designed the database highlighted how the system works. One major pitfall is that the ginning companies have not appreciated the system which has resulted in not using it the way it was supposed to. It was agreed that a meeting to presentation highlight how the system works be made and presented to the ginning companies to create demand for the product.
  - Kabwe and Tschirley (by Skype) participated in a meeting with Cotton Association of Zambia to strategize on how to move forward with an information system on the credit status of smallholder cotton farmers in the country. This system is expected to be the precursor to a credit bureau for the sector. As part of its role as a non-voting advisory member of the Board, FSRP/MATEP agreed to initially host the database on its server and to strategize with the newly formed Cotton Board on how to use the resulting data to improve understanding of and programs in the sector.
  - As a follow up to issues of creation of the database, the Cotton Board does not want to restrict itself to reviewing just one database before making a decision which databases would be adopted. Stephen Kabwe has been involved in the discussion with the secretariat on these issues. Therefore, the Cotton Board will now review the database of Dunavant, in addition to the CAZ data base. A meeting to make a presentation on this database is organized.
- Stephen Kabwe worked with Cotton Development Trust officers to publish three cotton policy briefs in Cotton News in Zambia for 2008. The briefs, drawing on Policy Syntheses that the project has produced, are entitled: “An Urgent need for Effective Public-Private Coordination in Zambia. Deliberation on the Cotton Act”, “Quality” (assessing how Zambia compares to its African neighbors in performance on cotton lint quality) and “Price” (likewise comparing Zambia’s performance in this dimension with its African neighbors). All these results were based on the earlier mentioned cross-country comparatively study.
- Stephen Kabwe prepared the visit to Zambia by Mr. Axel Drieling of Faserinstitut Bremen (German), head of the Commercial Standardization of Instrument Testing of Cotton Project, and Mr. Humphrey Shango of Tanzania Cotton Board, also a member of a Regional Testing Centre in Tanzania, in March 2009 to see the laboratories that are used to test the characteristics of cotton lint in order to harmonize and validation of reliability of cotton testing/ of cotton testing laboratories. The Commercial Standardization of Instrument Testing of Cotton Project was formed as part of continuing efforts to improve trade and processing of cotton lint internationally. The project is co-funded by the European Union and Common Fund for Commodities and is supervised by the International Cotton Advisory Committee.

- Tschirley and Kabwe made a presentation on cotton sector regulatory approaches in Africa at a virtual workshop sponsored by the World Bank. This work was part of a broader regional effort growing out of the previous work that FSRP did with colleagues from across the continent on cotton sector reform.
- Kabwe was appointed by International Cotton Advisory Committee to represent Zambia at a seminar on sustainable cotton production from 6<sup>th</sup> to 16<sup>th</sup> April 2009 in Washington DC United States. He made a presentation on the Evolution of the Cotton and Textile Industry in Zambia. A report highlighting important points and recommendations from the seminar was prepared and submitted to MACO.
- At the request of CAZ and GAZ, FSRP/MATEP prepared a profile of activities the project undertakes in the cotton value chain for the benefit of the newly seated Cotton Board.
- Working with Kabwe, Tschirley finished a draft of the regulatory report for Zambia.
- Kabwe participated in a meeting with Secretary to the Cotton Board. Among issues discussed were registration of smallholder farmers, registration fees and cotton levies. Learning from other Boards Kabwe prepared a short briefing note for the secretary of the Board to follow for subsequent meetings.
- Tschirley began planning analytical work with Joey Goeb, M.S. candidate at MSU, evaluating the boom-and-bust cycles in Zambia's cotton sector and examining the impact of GRZ support to maize – in the form of FRA purchases and FSP fertilizer distributions – on decisions by smallholder farmers whether to plant cotton and how much. A research report is expected on this during 2Q10.

### *Fertilizer Value Chain*

- Developed a draft policy synthesis from the paper "**Fertilizer Subsidies and Sustainable Agricultural Growth in Africa: Current Issues and Empirical Evidence from Malawi, Zambia and Kenya**".
- Kasweka and Jones analyzed fertilizer purchase behavior among households in the supplemental panel survey of 2001 and 2004. Looked at the changes in the distances households covered to collect fertilizer from an outlet between the two surveys. Variations in the distance travelled by type of outlet (government or commercial) and by the district profile (near or far from line of rail) are being looked at. FSRP/MATEP researcher also continued work with ACF to use existing CSO/MACO/FSRP rural household data to inform question about production, marketing and consumption, as well as fertilizer use, among different categories of small and medium-size smallholder households in Zambia. This analysis and associated outreach was aimed at improving the targeting of assistance and economic services to smallholders. See: [Background Materials to Support the Feb 4, 2009 Budget Analysis Presentation: Small and Medium-Scale Household Income and Other Characteristics by Quintile of Household Per-Capita Land Use - 2004](#). Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber
- Jayne, Black and others at MSU distilled major conclusions and lessons learned on improving the profitability of fertilizer use by smallholder farmers in Zambia. The main conclusions were that – given the general conditions that farmers face – fertilizer applied to maize is profitable only in a relatively small number of geographic areas and farmer conditions. Factors that greatly affect the profitability of fertilizer use include (i) whether the fertilizer is delivered to farmers on time; (ii) application rates – standard 4x4 bag recommendations result in lower returns than lower rates; (iii) plowing techniques; (iv) recent mortality or illness of adult household members; (iv) soil type. The findings can be used by the Ministry of Agriculture, out grower companies, and NGOs to provide more geographically disaggregated recommendations to farmers. Other conclusions relate to targeting of FSP. Targeting relatively poor households will result in greater incremental fertilizer use in the country.

- ACF/FSRP presented cotton, fertilizer reforms and 2009 agriculture budget background information to the Parliamentary Committee on Agriculture and Lands, and other key stakeholders at a workshop at Ibis Garden on 20/21 Feb. The FSRP web site posting of policy presentations from this outreach work are:
  - [ACF/FSRP Sharing Evidence-Based Research Results with the Parliamentary Committee on Agriculture and Lands: Selected Policy Background Information Towards More Effective GRZ and Private Sector Investment to Reduce Rural Poverty and Improve Food Security](#). Ibis Garden, Chisamba Area, 20/21 February, 2009.
  - [Agenda](#)
  - Radio News Summary on Proposed Fertilizer Reforms: Sunday, 22 Feb, 2009 (ZNBC Radio 4 - ZNBC Four). To listen: [Download MP3 file\(2MB\)](#)
  - [Background Information on the Rural Smallholder Farm Sector: What Does Empirical Information Tell Us About Maize Sector Productivity and Related Agricultural Input Use?](#) Antony Chapoto and Michael Weber.
  - [Categorization Tables: Small and Medium-Scale Household Income and Other Characteristics By Quintile of Household Per-Capita Land Use - 2004](#)
  - [Effective Public-Private Coordination in Zambia's Cotton Sector: Deliberation on the Revised Cotton Act](#). Stephen Kabwe, FSRP.
  - [Strengthening the Cotton Act of 2005](#). The Cotton Working Group
  - [Study Team Report on Proposed Reforms of the Zambian Fertilizer Support Programme \(FSP\)](#). Coillard Hamusimbi, ZNFU
  - [Voucher Programme Presentation](#). Mark Woods, Rob Munro, Brett and Brent Magrath.
  - [Draft Report on Proposed Reforms for the Zambian Fertilizer Support Programme](#). The Fertilizer Review Team
  - [Public Agriculture Spending: Trends & Key Trade-offs](#). Jones Govereh
  - [Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implication for Agricultural Productivity Growth](#). Jones Govereh, et al. 2009
- [Discussing the 2009 National Budget for Zambian Agriculture](#). ACF/FSRP Research Staff. Antony Chapoto and Michael Weber. Presented at the Agricultural Consultative Forum Annual Stakeholders Breakfast Budget Workshop, Pamodzi Hotel, Lusaka, Zambia. 04 Feb. 2009
- [Background Materials to Support the Feb 4, 2009 Budget Analysis Presentation: Small and Medium-Scale Household Income and Other Characteristics by Quintile of Household Per-Capita Land Use - 2004](#). Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber
- FSRP/MATEP completed a draft report entitled "**Factors Influencing the Profitability of Fertilizer Use on Maize in Zambia,**" which provides information that can help inform the government's consideration of how to restructure its fertilizer subsidy program.
  - [Factors Influencing the Profitability of Fertilizer Use on Maize in Zambia](#). Zhiying Xu, Zhengfei Guan, T.S. Jayne, and Roy Black. FSRP Working Paper No. 39. Lusaka, Zambia. June 2009.
- ACF/FSRP prepared written and oral testimony (presented on April 4, 2009) on FSP reforms to be presented at the invitation of the Parliamentary Committee on Agriculture and Lands. Written materials and the oral presentation were also published on the ACF and FSRP web sites. The researchers also reappeared a second time at the Ag and Lands Committee (on May 5, 2009) to continue the discussion of FSP reforms.
- FSRP researchers (Weber and Chapoto) did additional work with Donor CP in preparation of a second round of written communication between Donor CP and GRZ on FSP reform options. This involved preparation of additional analysis from the Crop Forecast data for 2008/2009 on fertilizer use and source by District. This information was incorporated into Donor CP communications with GRZ.

- ACF/FRSP researchers (Kabaghe, Nijhoff, Jayne) prepared outreach materials and made presentations at a COMESA sponsored AAMP meeting at Victoria Fall organized under the theme ‘**Getting Fertilizers to Farmers: How to do it, who should do it, and how it should be done**’.
- Presented coming policy attractions for discussion at a meeting of donor cooperating partners and the ACF/ FSRP research/outreach team.
  - [Coming Policy Attractions – An Overview of On-Going Research & Potential Outreach](#). By the ACF/FSRP Team. ACF Offices, June 2, 2009.
- Presented Comments and Handouts to Inform Discussion of Rural and Urban Food Security Issues in Zambia at a Meeting To Introduce the EU Food Facility For Rapid Response the Soaring Food Crisis.
  - [Comments to Inform Discussion of Rural and Urban Food Security Issues. PowerPoint presentation](#). By The ACF/ FSRP Research/Outreach Team, Presented by Michael Weber & Hyde Haantuba Chrismar Hotel, 6 May, 2009
  - [Characteristics of Small and Medium-Scale Crop-Growing Households in Zambia: Preliminary Comparison of Results from CSO/MACO/FSRP National-Level Supplemental Surveys in 2003/04 and 2007/08 Crop Marketing Seasons](#). Tadeyo Lungu, Antony Chapoto, Margaret Beaver and Michael Weber. (Draft for Review, 4 May, 2009). Handout 1.
- Testimony to the Parliamentary Committees on Agriculture and Lands on Performance of the Fertilizer Support Programme in Zambia. Hyde Haantuba and Nawiko Masiye, Agricultural Consultative Forum, and Antony Chapoto and Michael Weber, Food Security Research Project. National Assembly, Parliament Building, Lusaka. 22 April 2009
  - Written Submission - 1) [On Fisheries](#); and 2) [On Performance of the Fertilizer Support Programme](#)
  - Oral Presentation - [On Performance of the Zambian Fertilizer Support Programme](#)
- Presented a paper on fostering agricultural markets development at the Zambia National Symposium, Harnessing the Potential of Agriculture to Meet the Increasing Demands from a Growing Population. Held at the University of Zambia, Lusaka, Zambia. April 7-8, 2009.
  - [Fostering Agricultural Market Development in Zambia](#). Gelson Tembo, Antony Chapoto, T.S. Jayne and Michael Weber.
- Press coverage on ACF/FSRP and Donor CP input and discussion of FSP reform during this reporting period was as follows:
  - [State ponders revision of tender procedure for agricultural inputs](#) (Daily Mail, Sept 7, 2009)
  - [GRZ reduces agricultural input packs under FSP](#) (Post Sept 2, 2009)
  - [COMESA bemoans poor attention to agriculture - Post June 27,2009](#)
  - [Zambian Economist\\_ FSP Reform](#)
  - [MACO Sent Packing on FSP April28\\_09 Times of Zambia](#)
  - [ACF on-FSP April28\\_09 Zambia Daily Mail](#)
  - [OpenFSPtoCompetition Times 42609](#)
  - [FSP Post Daily Mail April28\\_09](#)
  - [Crop Forecast Kickoff Times\\_Ap\\_17\\_09](#)
  - [Crop Forecast Kickoff Daily Mail\\_Ap\\_17\\_09](#)
  - [Minister Chituwo on Food Costs and FSP](#) - Post, April 8/09
  - [Editorial - On Fertilizer Support Programme](#). Times, April 8
- ACF/FRSP made a presentation at the ministers’ retreat workshop on the proposed reforms of the Fertilizer Support Programme in Zambia and why the adoption of the proposed recommendations had stalled. The new PS showed an interest to help move the proposals forward before the start of the 2010/2011 agricultural season and requested ACF/FSRP to propose a detailed implementation structure and plan for inclusion into the 2010 budget. As a follow up to the Ministers retreat, Kabaghe and Chapoto worked with ACF on drafting implementation structure and plan. This note was subsequently presented to the PS by Kabaghe and ACF. Among other recommendations, the team recommended that MACO sets up an independent Programme Implementation Unit (PIM) which reports to the Policy

and Planning Department of the Ministry. At the policy level, the PIM will be guided by a Steering Committee comprising of the PS (chairperson), Director of Policy and Planning, MACO, Director of Budgets- Ministry of Finance and representatives from the farming community, the fertilizer Association of Zambia, the Seed Association of Zambia, Agro-Chemical Association of Zambia Bankers Association of Zambia and the Chairperson of the Agro NGO Forum (PAM)

### *Livestock Value Chain*

- FSRP prepared a draft paper “**Zambia Livestock Sector Information from CSO/MACO/FSRP Surveys: 2007-2008 Urban Consumption Patterns and 2007/2009 Rural and Urban Livestock Numbers for Small, Medium and Large-Scale Households**”. It is being revised following feedback received from MACO and will be finalized and added to the ACF/FSRP web site in Q 4 2009.
- Weber participated in an August 12, 2009 World Bank review of a pro-poor livestock project concept note: “**Taking Stock: Mining and Enhancing Africa Livestock Sector Data**”.
- Weber has completed in this reporting period background work to add information and internet-based resources on various types of livestock to the Zambia Topic Directory on the FSRP web site.

### *5.6 Regional Trade Perspectives on Food Staples and Input Markets*

- During the 4<sup>th</sup> Q of 2008, the team produced a consolidated working paper for use in regional trade policy discussions with COMESA. Entitled “**Regional Trade in Food Staples: Prospects for Stimulating Agricultural Growth and Moderating Short-Term Food Security Crises in Eastern and Southern Africa**,” that paper served as a conference keynote paper at the December 9-11, 2008 COMESA regional policy workshop on “**Trade in Food Staples in Eastern and Southern Africa: The Role of Intra-Regional Trade in Price Stability and Food Security**” in Nairobi.
- This section has since been deleted from the new work plan. Work related to trade of staples and inputs has been incorporated into the appropriate value chain

### *5.7 Alternative Instruments for Stabilizing National Food Availability and Prices*

- This section has been deleted from the new work plan. Work related to stabilizing national food availability and prices is under maize value chain

### *5.8 Consumption Behavior of Rural and Urban Households*

- Hichaambwa, Chapoto, Weber and Beaver continued work on finalizing a report based on the urban consumption data: “**Patterns Of Urban Consumption And Expenditure In Zambia: A General Report Based On The CSO/MACO/FSRP Urban Consumption Survey In Urban Areas Of Lusaka, Kitwe, Mansa And Kasama, 2007-2008**”.
- David Tschirley, with input from Munguzwe Hichaambwa and colleagues in other countries, used urban survey data as part of a paper on priorities for investment in Africa’s fresh produce production and marketing systems in the absence of rapid supermarket takeover.
- Mason and other FSRP researchers continued to work on the analysis of the urban survey data for a study of staple food consumption patterns in four urban areas covered in the urban



survey. The study highlights the rising importance of wheat in urban staple food consumption patterns, and the extent to which consumers pay unnecessarily high prices for maize meal resulting from scarcity of grain in informal markets during the hungry season.

- FSRP has worked on spatial dimensions of staple food consumption, production and marketing Zambia operates in a regional economy. In good harvest years, Zambia exports food. In bad years, the country requires imports. Even in normal seasons, Zambia's proximity to the DRC makes it economical for surplus commercial farms in northern and central Zambia to supply large urban markets in Katanga and Kasai provinces of DRC. This policy synthesis provides a visual map of Zambia's population, food consumption, production and trade flows in a regional context in order to help policy makers understand spatial interactions in staple food markets. By presenting market information visually, this policy synthesis aims to help animate an ongoing dialogue on key market flows, key bottlenecks and key opportunities for improving food security in good and bad harvest years. Most of the mapping work for this study was completed in Q2 of 2009 and a draft policy synthesis was produced in Q3 2009. It awaits comments from team members and final formatting.
- Mason, Jayne, Chapoto, and Cynthia Donovan analyzed trends in the ratio of wages to retail maize, wheat, and cassava prices in Lusaka, Kitwe, and Mansa (as well as in other urban centers in Kenya and Mozambique) from 1993-2009 to better understand 'how high' food prices were during the recent food price crisis and what the longer-term trends in staple food purchasing power were during the 15 years prior to the crisis. This work was presented by Mason at a symposium on **"The Food and Financial Crises and their Impacts on Achievement of the Millennium Development Goals in Africa"** at Cornell University in May and at an MSU Department of Agricultural, Food & Resource Economics brownbag on September. The paper is available as an MSU International Development Working Paper (**"Are Staple Foods Becoming More Expensive for Urban Consumers in Eastern and Southern Africa? Evidence from Kenya, Mozambique, and Zambia"**). A version of the paper was also submitted to *Food Policy* and is currently being revised following receipt of reviewer comments.

### ***5.9 Household Impacts and Behaviors***

- FSRP in-country researchers (Chapoto, Weber and Lungu) continued working with ACF to refine, distribute and discuss the smallholder categorization tables developed to examine various rural household socio-economic characteristics according to household land and assets access attributes. Weber also worked with Margaret Beaver to enhance the search for characteristics that distinguish at-risk-households by developing a new set of basic tables on net maize market position but including variables on calories retained on-farm from maize and from a basket of staple foods produced, including all grains, roots and tubers.
- Weber and Haantuba presented insights from the smallholder categorization analysis at workshop "To Introduce the EU Food Facility For Rapid Response the Soaring Food Crisis"- Chrismar Hotel, 6 May, 2009. The presentation was: "Comments and Handouts to Inform Discussion of Rural and Urban Food Security Issues in Zambia. By The ACF/FSRP Research/Outreach Team, Presented by Michael Weber & Hyde Haantuba.
- Drawing on insights from ongoing household and market-level analysis, the ACF/FSRP research/outreach team organized on June 2, 2009 at ACF for Donor Cooperating Partners a meeting on ["Coming Policy Attractions – An Overview of On-Going Research & Potential Outreach"](#).
- Haggblade and Chapoto in collaboration 2 lectures with UNZA Department of Sociology and Agricultural Economics continued to work on a study that aims to improve the understanding of households' pathways into, and out of, poverty, with poverty defined from both the communities' own perspective and poverty indicators such as household welfare

(asset holdings and income). Specifically, the study aims to a) provide an empirical understanding of how initially poor smallholder farmers have risen out of poverty, and the extent to which this involves interactions between agricultural markets, improved farm technology, and non-farm earnings and b) examine the dynamics of commercialized smallholder agriculture, particularly the background of households selling in staple food markets, how this changes over time, and how and if net buyers graduate to become net sellers of staple foods. Field work for this study will begin in October 2009. Part of the field interviews will be completed before the end of the rainy season. The remainder will be interviewed in July 2010.

## **5.10 General Policy Research and Outreach Support, Including Zambian Collaborator In-Service Strengthening**

- **CSO/MACO Survey Data Verification and Processing Strengthening:** As in previous years, FSRP staff interacted with and assisted CSO and MACO with:
  - Providing input in the 2008/9 CFS instrument
  - Development of labels for survey instrument boxes to be used in cleaning/verification
  - Procurement of survey instrument boxes and bookcase in preparation for the cleaning/verification exercise
  - Cleaning of the CFS data and production of annual crop production estimates and food balance sheet.
  - Training in basics (introductory) of SPSS and the writing of syntaxes (SPSS program instructions/commands) for cleaning CFS and PHS data
  - Developing of better methods of estimating maize grain utilisation for use in the food balance sheet
  - Reviewing of the weighting procedures in the CFS data for more accurate crop estimates.
- **Supporting Re-SAKSS-SA's Regional Research and Outreach Agenda:** This was accomplished through:
  - ReSAKSS coordinator Pius Chilonda visiting Lusaka in Q1 2009 as a follow up on the agreement on ReSAKSS-SA/MSU.
  - FSRP finalizing the publication with ReSAKSS on trends in public sector agriculture spending in Zambia.
  - Attending and making presentations at the ReSAKSS Regional meeting in Botswana in December 2008.
- **Collaboration/Strengthening of Agricultural Consultative Forum (ACF):** Work in this reporting year with ACF, included:
  - Holding of various joint monthly management meetings and special meetings at which issues pertaining to the forthcoming merger between the two institutions were deliberated.
  - Participation in mid-year review of activities and work plan
  - Joint hosting of policy dialogue meetings with high level Government officials
  - Participation in stakeholder meetings, including the Annual General Meeting
  - Coordination and participation in the ACU including policy presentations such as the draft policy brief on trends in cassava production and marketing
  - Participation in the developing of the draft terms of reference for the upcoming wheat value chain study
  - Participation and presentation of key note paper on strategic public private partnerships in agricultural marketing
  - Finalized the draft subcontract and development of a workplan for moving forward with an ACF/MSU(FSRP) sub agreement.
  - Planning and hosting of high level policy dialogue with 5 key government ministers

- Collaborating with ACF in oral and written submissions to the Agriculture and lands Committee of the National Assembly on key issues including agricultural marketing and the Fertiliser Support Programme
- Planning and coordinating the FSP study tour of stakeholders following which a report was made outlining proposed reforms which were presented to various stakeholders at a number of forums. Following up developments with regard to these reforms following a proposal that was presented to MACO.
- Working with ACF, MACO and various NGO and donor staff on the smallholder categorization work. The purpose of this joint ACF/FSRP analysis and outreach is to assist GRZ and donor NGO's in the design and targeting of program benefits for various kinds of smallholders
- **Collaboration with Zambia National Farmers Union:**
  - Worked closely with the ZNFU representative on the Zambia FSP Reform Team, including close cooperation in preparing various follow up materials after the initial presentation of the Study Team report was made.
  - Met with ZNFU researcher (John Fynn) to discuss additional analysis and data needs for understanding the maize price and supply situation in Zambia during the current marketing season.
  - Continued collaborations on the impending implementation of the SMS horticultural market information system to be added to the ZNFU commodity price web site: <http://www.farmprices.co.zm/>
- **Collaboration with Conservation Farming Unit:**
  - Continued interaction with CFU researchers on the development of key data parameters for a linear programming model being developed by FSRP researchers to examine economic benefits of selected conservation farming practices.
  - Continued informal meetings with Peter Aagaard and others at CFU to exchange information on conservation farming, fertilizer use and the fertilizer support program in Zambia
  - Worked closely with the CFU representative on the Zambia FSP Reform Team, including close cooperation in preparing various follow up materials after the initial presentation of the Study Team report was made.
- **MACO Collaboration with FSRP Studies and Outreach:**
  - Worked with MACO Data Base Management Unit on issues related to the design and analysis of data from the annual MACO Crop Forecast Survey
  - Worked with MACO staff on data to analyse the Fertilizer Support Programme (FSP).
  - Worked closely with the MACO representatives on the Zambia FSP Reform Team, including close cooperation in preparing various follow up materials after the initial presentation of the Study Team report was made
  - Continued interactions and support to AMIC on market information.
  - Participate in an AMIC/MACO arranged meeting with an FAO Mission working on a agricultural statistics - Zambia Country Data Base Project.
  - Interacted with MACO with a view to obtain data from the study on utilization of maize grain by commercial maize processing firms in the milling, animal feed and opaque beer/energy drink sectors.
- **Collaboration with the Ministry of Finance and National Planning (MoFNP):**
  - Interacted with colleagues in the Ministry of Finance and National Planning (MoFNP) to obtain collaboration in the FSR Reform Study Tour. MoFNP nominated Mr. David Zulu to participate..
  - Worked closely with the MoFNP representative on the Zambia FSP Reform Team, including close cooperation in preparing various follow up materials after the initial presentation of the Study Team report was made.
  - MoFNP researchers continued consultations about the FSRP /ACF outreach to Parliamentarians that was held during the year under review.

- **Collaboration with UNZA:**
  - Collaborated with UNZA Departments of Sociology and Agricultural Economics continued to work on a study that aims to improve the understanding of households' pathways into, and out of, poverty, with poverty defined from both the communities' own perspective and poverty indicators such as household welfare (asset holdings and income).
- **Collaboration with GART and ZARI:**
  - Collaborative work has continued with GART in developing a linear programming model of CF in order to measure the prospective gains to smallholder income by adopting CF and shifting peak season land preparation labor to the dry season.
  - FSRP has collaborated with ZARI in its work on analyzing returns to investments in cassava and sweet potatoes research.
- **Collaboration with Various Donor Studies/Consultants Working on Zambian Issues:**
  - FSRP team members met with a number of Consultant firms wishing to know more about FRSP/ACF activities in Zambia, these include representatives from Boz Allen and Hamilton Inc and DAI.
  - Collaboration with numerous donor studies and consultants working on Zambian issues

## 6. FSRP Staff Members

### Researchers Involved During the 2008/2009 Period:

**Food Security Research Project (FSRP) In-Country Researchers:** Chance Kabaghe (Director), Antony Chapoto (Research Coordinator), Kasweka Chinyama, Tadeyo Lungu, Munguzwe Hichaambwa, Stephen Kabwe, and Michael Weber.

- Jan Nijhoff joined the FSRP staff in a part time position.
- Mukwiti Mwiinga continued finalizing her M.S. thesis and with David Tschirley has continued working on policy presentations on tomato production and marketing issues.
- Another Zambian researchers who is a MS degree candidate s in agricultural economics at MSU joined the FSRP team in January 2008 to work on their respective thesis research topics (Dingi Banda)

**MSU Campus Backstop:** Steven Haggblade, Thomas Jayne, Steve Longabaugh David Tschirley, James Shaffer and Margaret Beaver.

### Project Visitors During the 2008/2009 Period:

- Jayne came in Q4 2008 to work with FSRP staff.
- Haggblade came in Q4 2008 to work with the ACU and to explore possibilities of additional research on adoption of new sweet potato and cassava cultivars.
- Crawford came in Q4 2008 to work with FSRP staff on the possibility of additional research on adoption of new sweet potato and cassava cultivars.
- Jayne visited from 27 February to 5 March , 2009 to work with FSRP staff
- Tschirley visited from 10 to 15 March, 2009 to work with FSRP staff on cotton and horticulture issues.
- Beaver visited in March to May 2009, to provide technical support to MACO and CSO during CFS data cleaning before the announcement of the crop forecast by the Minister of Agriculture

- In June 2009, Steve Haggblade and Eric Crawford visited Lusaka and Luapula provinces to interview cassava and sweet potato farmers as well as stakeholders involved in promoting improved varieties of these two food staples. During this trip, the team came to agreement with ZARI and FoDiS on the specifics of a collaborative study of returns to research on sweet potato and cassava in Zambia.
- Jayne visited from June 13 to July 2, 2009 to work on fertilizer policy and outreach issues and to work with colleagues on maize pricing issues. He also assisted Kabaghe in assuming his new duties as FSRP Director.
- Haggblade, visited in Q3 2009 for his continuing work in cassava value chains, return to investments in sweet potatoes research and household impact and behavior.
- Beaver visited from 12 to 27 September trained MACO and CSO staff including our own Kasweka in 2 modules of SPSS: Introductory/Beginner's course and syntax writing

## ANNEXES

### A.1 FSRP Policy Extension and Outreach Activities/Presentations

- [Creation of a Public/ Private Partnership Marketing Institution](#). Chance Kabaghe. Presented at the 5th Annual General Meeting of the ACF. Pamodzi Hotel, Lusaka. 24 September 2009
- [The Impact Of Wildlife Conservation On Rural Welfare In Zambia](#). Robert B. Richardson, Ana Fernandez, and David Tschirley. Presented at the U.S. Society for Ecological Economics. June 1, 2009.
- [Agricultural Trade Flows in Southern Africa: Do Regional Preferential Trade Agreements make a Difference?](#) G. Tembo and T. S. Jayne. Presented at the XXVII International Conference of Agricultural Economists, Beijing Conference Center, China, 20 August 2009.
- [A Test of the New Variant Famine Hypothesis: Panel Survey Evidence from Zambia](#). N. Mason, T. S. Jayne, A. Chapoto, & R. Myers Presented at the XXVII International Conference of Agricultural Economists, Beijing Conference Center, China, 21 August 2009.
- ACF/FSRP Agriculture Policy Dialogue with High Level Government Officials. Protea Lodge, Chisamba, Lusaka, Zambia 14-15 August 2009
  - [Proposed Reforms of the Fertiliser Support Programme](#). Hyde Hantuba.
  - [CAADP Zambia – So Near and Yet So Far](#). Jan Nijhoff.
  - [Public Agriculture Expenditure](#). Jones Govereh.
  - [Marketing and Trade in Food Staples](#). Chance Kabaghe.
- [Discussing the 2009 National Budget for Zambian Agriculture](#). Antony Chapoto. Stakeholder meeting on the Tax and Non-Tax Policy Proposals for the 2010 National Budget. 23 July 2009.
- [Cotton Sector Regulation in Zambia. A Preliminary Case Study](#). David Tschirley, Stephen Kabwe. Presented at "Virtual Workshop on Cotton Sector Regulation in Africa" sponsored by the World Bank. 29 June 2009.
- [Agricultural Consultative Forum \(ACF\) & Food Security Research Project \(FSRP\) News: Information on the Fertilizer Support Programme \(FSP\) Review 2009](#). ACF and FSRP. June 2009
- [Measuring the impacts of trade barriers and market interventions on maize price instability: Evidence from Eastern and Southern Africa](#). A. Chapoto and T. S. Jayne. Presentation at the Regional Consultation Workshop on: “ The Use and Impact of Trade and Domestic Policy Interventions on Cereal Value Chain Stakeholders in Eastern and Southern Africa”. Dar es Salaam, Tanzania, June 3-4, 2009.
- [Coming Policy Attractions – An Overview of On-Going Research & Potential Outreach](#). Presentation for Discussion at a Meeting of Donor Cooperating Partners and The ACF/ FSRP Research/Outreach Team. By the ACF/FSRP Team. ACF Offices, June 2, 2009.
- [Presentation on how to prepare cassava cheese bread](#). M.T. Weber. May 23, 2009.
- [Modernizing Africa’s Fresh Produce Supply Chains without Rapid Supermarket Takeover Towards a Definition of Research and Investment Priorities](#). David Tschirley, Milton Ayieko, Munguzwe Hichaambwa, Joey Goeb. Wayne Loescher. Presented at the Conference on Agricultural Markets, organized by the CGIAR system and Alliance for a Green Revolution in Africa (AGRA), May 13-15, 2009. Nairobi, Kenya.
- Comments and Handouts to Inform Discussion of Rural and Urban Food Security Issues in Zambia. By The ACF/ FSRP Research/Outreach Team, Presented by Michael Weber & Hyde Haantuba. Presentation at a Meeting To Introduce the EU Food Facility For Rapid Response the Soaring Food Crisis- Chrismar Hotel, 6 May, 2009
  - [Comments to Inform Discussion of Rural and Urban Food Security Issues. Powerpoint presentation.](#)
  - [Characteristics of Small and Medium-Scale Crop-Growing Households in Zambia: Preliminary Comparison of Results from CSO/MACO/FSRP National-Level Supplemental Surveys in 2003/04 and 2007/08 Crop Marketing Seasons](#).

Tadeyo Lungu, Antony Chapoto, Margaret Beaver and Michael Weber. (Draft for Review, 4 May, 2009). Handout 1.

- [Are Staple Foods Becoming More Expensive for Urban Consumers in Eastern and Southern Africa? Trends in Food Prices, Marketing Margins, and Wage Rates in Kenya, Malawi, Mozambique and Zambia.](#) N. Mason, T. Jayne, C. Donovan and A. Chapoto. (Draft for Review, 24 April, 2009) Handout 2.
- [Are staple foods becoming more expensive for urban consumers in eastern and southern Africa?](#) N. Mason, T. Jayne, C. Donovan and A. Chapoto. Presentation at the Symposium on Food and Financial Crises and Their Impacts on the MDGs in Africa. Institute for African Development. Cornell University May 2, 2009
- [Exploring the Logic Behind Southern Africa's Food Crises.](#) T.S. Jayne and David Tschirley. Presented at the Symposium on The Food and Financial Crisis and their Impacts on Achievement of the Millennium Development Goals in Africa. Institute for African Development. Cornell University. 2 May 2009
- Testimony to the Parliamentary Committees on Agriculture and Lands on Performance of the Fertiliser Support Programme in Zambia. Hyde Haantuba and Nawiko Masiye, Agricultural Consultative Forum, and Antony Chapoto and Michael Weber, Food Security Research Project. National Assembly, Parliament Building, Lusaka. 22 April 2009
  - Written Submission - 1) [On Fisheries](#); and 2) [On Performance of the Fertiliser Support Programme](#) Oral Presentation - [On Performance of the Zambian Fertiliser Support Programme](#)
- [The Evolution of the Cotton and Textile Industry in Zambia.](#) Stephen Kabwe. A presentation at ICAC Research Associate Program, Washington DC, 10 April, 2009
- [Fostering Agricultural Market Development in Zambia.](#) Gelson Tembo, Antony Chapoto, T.S. Jayne and Michael Weber. Presented at the Zambia National Symposium, Harnessing the Potential of Agriculture to Meet the Increasing Demands from a Growing Population. Held at the University of Zambia, Lusaka, Zambia. April 7-8, 2009
- [Beyond Fire Fighting To Using Information for Strategic Planning and Decision Making: Opportunities & Challenges in MACO to Use Information for Longer-Term Policy and Programme Formulation & Impact Improvement.](#) Tadeyo Lungu & Michael Weber. Agricultural Consultative Forum/Food Security Research Project. MACO Participatory Self Assessment Workshop, Ibis Garden. 18/19 March, 2009.
- ACF/FSRP Sharing Evidence-Based Research Results with the Parliamentary Committee on Agriculture and Lands: Selected Policy Background Information Towards More Effective GRZ and Private Sector Investment to Reduce Rural Poverty and Improve Food Security. Ibis Garden, Chisamba Area, 20/21 February, 2009.
  - [Agenda](#)
  - Radio News Summary on Proposed Fertilizer Reforms: Sunday, 22 Feb, 2009 (ZNBC Radio 4 - ZNBC Four) . To listen: [Download MP3 file\(2MB\)](#)
  - [Background Information on the Rural Smallholder Farm Sector: What Does Empirical Information Tell Us About Maize Sector Productivity and Related Agricultural Input Use.](#) Antony Chapoto and Michael Weber.
  - [Categorization Tables: Small and Medium-Scale Household Income and Other Characteristics By Quintile of Household Per-Capita Land Use - 2004](#)
  - [Effective Public-Private Coordination in Zambia's Cotton Sector: Deliberation on the Revised Cotton Act.](#) Stephen Kabwe, FSRP.
  - [Strengthening the Cotton Act of 2005.](#) The Cotton Working Group
  - [Study Team Report on Proposed Reforms of the Zambian Fertiliser Support Programme \(FSP\).](#) Coillard Hamusimbi, ZNFA
  - [Voucher Programme Presentation.](#) Mark Woods, Rob Munro, Brett and Brent Magrath.
  - [Draft Report on Proposed Reforms for the Zambian Fertilizer Support Programme.](#) The Fertiliser Review Team
  - [Public Agriculture Spending: Trends & Key Trade-offs.](#) Jones Govereh

- [Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implication for Agricultural Productivity Growth-Draft for Review.](#) Jones Govereh, Emma Malawo, Tadeyo Lungu, Thomas Jayne, Kasweka Chinyama and Pius Chilonda. Draft for Review. 2009
- [Discussing the 2009 National Budget for Zambia Agriculture.](#) ACF/FSRP Research Staff. Presentation by Antony Chapoto and Michael Weber at the Agricultural Consultative Forum Annual Stakeholders Breakfast Budget Workshop, Pamodzi Hotel, Lusaka, Zambia. 04 Feb. 2009
- [Background Materials to Support the Feb 4, 2009 Budget Analysis Presentation: Small and Medium-Scale Household Income and Other Characteristics by Quintile of Household Per-Capita Land Use - 2004.](#) Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber.
- [Resource Materials - Zambia Agricultural Fertilizer Programme Study Tour: Gaining Insights From On-Going Reforms in Malawi, Kenya and Tanzania.](#) By ACF/FSRP
- [Potential for Intra-Regional Maize Trade in Southern Africa: An Analysis For Zambia at the Sub-National Level.](#) Steven Haggblade, Thomas Jayne, David Tschirley and Steve Longabaugh. Presented by M.T. Weber. Michigan State University – Food Security Group. Presentation at the SADC Southern Africa Regional Conference on Agriculture. Grand Palm Hotel, Gaborone, Botswana, December 8-9, 2008.
- [Promoting Fertilizer Use in Africa: Current Issues and Empirical Evidence from Malawi, Zambia, and Kenya.](#) Isaac Minde, T.S. Jayne, Joshua Ariga, Jones Govereh, and Eric Crawford. Presentation at the Southern Africa Regional Conference on Agriculture “Theme: Agriculture-led Development for Southern Africa: Strategic Investment Priorities for Halving Hunger and Poverty by 2015”. Grand Palm Hotel, Gaborone, 8-9 December, 2008.
- [Information Toward Goals of Poverty Reduction, Food Security, Enhanced Productivity and Income Growth for Small-scale Farmers in Zambia – Opportunities and Challenges.](#) ACF/FSRP Presentation By Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber. MACO/SIDA ASP Old and New Workshop, Chrismar Hotel, Lusaka. Dec 2-3, 2008.
- [Zambian Smallholder Farmer/Household Categorization Activity. Draft Set of Tables - Dec 1, 2008.](#) ACF/FSRP by Tadeyo Lungu, Augustine Mutelekesha, Antony Chapoto, Margaret Beaver and Michael Weber. Handout to accompany MACO/SIDA ASP presentation.
- [Tourism and Wildlife Conservation in Africa: Measuring the Impacts to Rural Households.](#) Robert B. Richardson and Ana Fernandez. Department of Agricultural, Food and Resource Economics (AFRE) Brown Bag Seminar Series. November 18, 2008.
- [Zambia Agricultural Policy: Finding a Balance Between Public Facilitation & Private Sector-Led Growth.](#) Jones Govereh and Michael Weber. Food Security Research Project. Presentation at a Mini-Workshop on Agricultural Policy in Zambia, Chrismar Hotel, 7 Oct, 2008.

## **A.2 FSRP Working Papers and Reports**

- [Wildlife Conservation in Zambia: Impacts on Rural Household Welfare.](#) Ana Fernandez, Robert B. Richardson, David Tschirley, and Gelson Tembo. Working Paper No. 41. September 2009.
- [Characteristics Associated with Prime-Age Mortality in Eastern and Southern Africa: Evidence from Zambia and Kenya.](#) Antony Chapoto, T.S. Jayne, L. Kirimi, and S. Kadiyala. International Development Working Paper #99. Michigan State University. September 2009.
- [Fostering Agricultural Market Development in Zambia.](#) Gelson Tembo, Antony Chapoto, Thomas Jayne, and Michael Weber. Working Paper No. 40. July 2009. (CDIE reference number pending)



- [Factors Influencing the Profitability of Fertilizer Use on Maize in Zambia](#). Zhiying Xu, Zhengfei Guan, T.S. Jayne, and Roy Black. Working Paper No. 39. Lusaka, Zambia. June 2009. (CDIE reference number PN-ADP-622)
- [Are Staple Foods Becoming More Expensive for Urban Consumers in Eastern and Southern Africa? Trends in Food Prices, Marketing Margins, and Wage Rates in Kenya, Malawi, Mozambique, and Zambia](#). Nicole Mason, T.S. Jayne, Cynthia Donovan, and Antony Chapoto. IDWP 98. June 2009.
- [Effects of Maize Marketing and Trade Policy on Price Unpredictability in Zambia](#). Antony Chapoto and T.S. Jayne. Working Paper No. 38. June 2009. (CDIE reference number pending)
- [Methodology for Two Weighting Applications for the 2008 Zambia Supplemental Survey](#). David J. Megill. Working Paper No. 37. April 2009. (CDIE reference number PD-ACO-141)
- [Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implication for Agricultural Productivity Growth](#). Jones Govereh, Emma Malawo, Tadeyo Lungu, Thom Jayne, Kasweka Chinyama and Pius Chilonda. Working Paper No. 36. February 2009. (CDIE reference number PD-ACO-140)
- [Potential for Intra-Regional Maize Trade in Southern Africa: an Analysis for Zambia at the Sub-National Level](#). Steven Haggblade, Thomas Jayne, David Tschirley and Steven Longabaugh. Working Paper No. 35. November 2008. (CDIE reference number PD-ACO-139)
- [Access to Land, and Poverty Reduction in Rural Zambia: Connecting the Policy Issues](#). T.S. Jayne, Ballard Zulu, Gear Kajoba, and M.T. Weber. Working Paper No. 34. October 2008. (CDIE reference number pending).
- [Assessment of Alternative Maize Trade and Market Policy Interventions in Zambia](#). Jones Govereh, T.S. Jayne and A. Chapoto. Working Paper No. 33. October, 2008. (CDIE reference number PN-ADN-055). [Commercial Dynamics in Zambia's Cassava Value Chain](#). Steven Haggblade and Misheck Nyembe. Working Paper No. 32. August 2008.

### A.3 FSRP Policy Syntheses

- [Access To Land And Poverty Reduction In Rural Zambia: Connecting The Policy Issues](#). T. S. Jayne, Ballard Zulu, Gear Kajoba and M. T. Weber. Number 33, Sept 2009.
- [The Impacts of Wildlife Conservation Policies on Rural Household Welfare in Zambia](#). Ana Fernandez, Robert B. Richardson, David Tschirley, and Gelson Tembo. Number 33, September 2009.
- [Factors Influencing the Profitability of Fertilizer Use on Maize in Zambia](#). Z. Xu, Z. Guan, T.S. Jayne, and Roy Black. Number 32, February 2009. (CDIE reference number PN-ADP-622)

### A.4 Notes on Current Topics and Events

- [Questions and Answers on Fertiliser Reform in Zambia](#) - September 2009
- [The Need to Reform the Fertilizer Support Programme \(FSP\)](#)- August 2009
- [The Challenges of FRA Maize Pricing](#) - July 2009

### A.5 Professional Publications

- Dorosh, P., Dradri, S., Steven Haggblade. 2009. ["Regional trade, government policy and food security: Recent evidence from Zambia"](#). Food Policy 34 (2009) 350–366.

- Xu, Z., Guan, Z., Jayne, T.S. and Black , R. 2009. "[Factors influencing the profitability of fertilizer use on maize in Zambia](#)". *Agricultural Economics* Volume 40 (2009): 437 - 446.
- Xu, Z, Burke, W. J., Jayne, T.S., and J. Govereh. 2009. "[Do Input Subsidy Programs 'Crowd in' or 'Crowd out' Commercial Market Development? Modeling Fertilizer Demand in a Two-Channel Marketing System.](#)" *Agricultural Economics* 40 (2009): 79-94.
- Haggblade, S., Maureen Chitundu and Klaus Droppelmann. 2008. [Intervening in Value Chains: Lessons from Zambia's Task Force on Acceleration of Cassava Utilisation.](#) *Journal of Development Studies.* 45(4): pages 593 - 620
- Chapoto, A. and T.S. Jayne. 2008. Impact of AIDS-Related Deaths on Farm Households' Welfare in Zambia. [Economic Development and Cultural Change.](#) 56 (2): 327-374.

## A.5 FSRP Website

Available at: <http://www.aec.msu.edu/agecon/fs2/zambia/index.htm>

- For a PDF version of the cumulative FSRP webpage as of Oct 1, 2009 see the button on FSRP web page: **Cumulative Project Output Reports: 2008/2009, 2007/2008, 2006/07, 2005/06, 2004/05**